

**Air Pollution Control District  
Jefferson County, Ky  
13 December 1999**

**TITLE V PERMIT SUMMARY**

**Company:** Louisville Gas and Electric, Zorn Generating Station

**Address:** 3001 Upper River Road, Louisville, KY 40207

**Date App Received:** 22 April, 1997

**Date Admin Complete:** 15 May, 1997

**Date of Draft Permit:** 17 October, 1999

**Date of Proposed Permit:** 17 October, 1999

**District Engineer:** Daphne C. Wilson

**SIC Code:** 4911

**NAICS:** 221112

**EIS#:** 1248

**Permit #:** 131-97-TV

**Introduction:**

This permit will be issued pursuant to: (1) District Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements applicable to Louisville Gas & Electric, Zorn Generating Station and to provide practical methods of determining continued compliance with these requirements. Louisville Gas & Electric, Zorn Generating Station generates electricity during a peak demand periods.

Jefferson County is classified, as of the date above, as an attainment area for lead (Pb), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), and particulate matter less than 10 microns (PM<sub>10</sub>); unclassifiable for particulate matter less than 2.5 microns (PM<sub>2.5</sub>); and is a moderate non-attainment area for ozone.

**Application Type/Permit Activity:**

☒ Initial Issuance

☐ Permit Revision

☐ Administrative

☐ Minor

☐ Significant

☐ Permit Renewal

**Compliance Summary:**

[X] Compliance certification signed      [ ] Compliance schedule included  
[ ] Source is out of compliance

**I. Source Description**

- 1. Class I Area Impacts:** This plant is not located in or near a Class I area.
- 2. Product Description:** Electric energy generation
- 3. Overall Process Description:** One natural gas fired turbine that produces electricity during peak periods
- 4. Site Determination:** There are no other facilities which are contiguous or adjacent and under common control.
- 5. Emission Unit Summary:**

U1-One generator with Emission Point designation E1 and Company equipment designation GT1, rated output capacity of 19,400 kW

- 6. Fugitive Sources:** None
- 7. Title V Major Source Status by Pollutant:**

| Pollutant         | Actual Emissions<br>(tpy) 1998 Data | Major Source Status |
|-------------------|-------------------------------------|---------------------|
| CO                | Negligible                          | No                  |
| NO <sub>x</sub>   | 9.90                                | Yes                 |
| SO <sub>2</sub>   | Negligible                          | No                  |
| PM                | Negligible                          | No                  |
| VOC               | 1.61                                | No                  |
| Single HAP >1 tpy | Negligible                          | No                  |
| Total HAPs        | Negligible                          | No                  |

- 8. MACT Standards:** None applicable

## 9. Applicable Requirements:

|                              |                                  |   |                                |
|------------------------------|----------------------------------|---|--------------------------------|
| <input type="checkbox"/> PSD | <input type="checkbox"/> NSPS    | <input checked="" type="checkbox"/> SIP             | <input type="checkbox"/> MACT  |
| <input type="checkbox"/> NSR | <input type="checkbox"/> NESHAPS | <input checked="" type="checkbox"/> District-Origin | <input type="checkbox"/> Other |

## II. Regulatory Analysis

1. **Emission and Operating Caps:** LG&E has requested to limit NO<sub>x</sub> emissions to less than 100 tons per year.
2. **Compliance Status:** The company signed and submitted a compliance certification in its Title V permit application.
3. **Operational Flexibility:** No alternative operating scenarios were requested by the company.
4. **Testing Requirements:** None
5. **Monitoring, Recordkeeping and Reporting Requirements:** Monitoring, Record keeping, and reporting are specified in the permit
6. **Periodic Monitoring:** The fuel usage is monitored monthly in order to demonstrate ongoing compliance with the NO<sub>x</sub> limit.
7. **Off Permit Documents**

The District considers an “off-permit document” as a document on which a source’s compliance with given regulation(s) is contingent or which contains regulatory requirement(s), but is only referenced in a source’s Title V Operating Permit. The designation “off-permit document” shall be made at the District’s discretion, and may include, but not be limited to, documents such as Regulation 1.05 VOC compliance plans, Preventative Maintenance Program (PMP), Management Of Change System (MOCS); or other documents which are too voluminous to place in the permit.

There are no off permit documents associated with this permit.

## III. Other Requirements:

1. **Temporary Sources:** None
2. **Short Term Activities:** None
3. **Compliance Schedule/Progress Reports:** None
4. **Emissions Trading:** None

**5. Acid Rain Requirements:** Not applicable

**6. Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR 68 Subpart F and District Regulation 5.15 in a quantity in excess of the corresponding specified threshold amount.

**7. Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. LG&E Zorn does not use any of the listed chemicals.

**8. Insignificant Activities:**

| Description  | Basis                     | Quantity |
|--|---------------------------|----------|
| Pressurized Reservoir (contains 50/50 glycol-water ) | Reg 2.02, section 2.3.26  | 1        |
| Lube Oil Tank (vents only when system running)       | Reg 2.02, section 2.3.9.2 | 1        |
| Pressurized Fuel Oil Tank (with no vent )            | Reg 2.02, section 2.3.26  | 1        |
| Brazing, Soldering, or Welding Equipment             | Reg 2.02, section 2.3.4   | Various  |
| Internal Combustion Engines                          | Reg 2.02, section 2. 2    | Various  |
| Emergency Relief Vents                               | Reg 2.02, section 2.3.10  | Various  |